

Title (en)

HEATING, VENTILATION, AND AIR-CONDITIONING SYSTEM AND METHOD OF CONTROLLING A HEATING, VENTILATION, AND AIR-CONDITIONING SYSTEM

Title (de)

HEIZUNGS-, LÜFTUNGS- UND KLIMAANLAGE UND VERFAHREN ZUR STEUERUNG EINER HEIZUNGS-, LÜFTUNGS- UND KLIMAANLAGE

Title (fr)

SYSTÈME DE CHAUFFAGE, DE VENTILATION ET DE CLIMATISATION ET PROCÉDÉ DE COMMANDE D'UN SYSTÈME DE CHAUFFAGE, DE VENTILATION ET DE CLIMATISATION

Publication

EP 4119861 A1 20230118 (EN)

Application

EP 21184944 A 20210712

Priority

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Abstract (en)

Various aspects relate to a method of controlling a heating, ventilation, and air-conditioning, HVAC, system, the method including: controlling indoor environmental conditions using the HVAC system, detecting a load of the HVAC system, inputting detected indoor environmental conditions and detected outdoor environmental conditions into a load prediction model to generate a predicted load, and training the load prediction model to reduce a difference between the predicted load and the detected load of the HVAC system; determining requested indoor environmental conditions associated with a future time period; determining predicted outdoor environmental conditions within the future time period using a weather forecast; inputting the requested indoor environmental conditions and the predicted outdoor environmental conditions into the trained load prediction model to determine a predicted load for the future time period; controlling the HVAC system to reduce a load of the HVAC system within the future time period using the determined predicted load.

IPC 8 full level

F24F 11/62 (2018.01); **F24F 11/70** (2018.01)

CPC (source: EP US)

F24F 11/46 (2018.01 - US); **F24F 11/62** (2018.01 - EP); **F24F 11/63** (2018.01 - US); **F24F 11/70** (2018.01 - EP); **G05D 23/1919** (2013.01 - EP);
F24F 2110/10 (2018.01 - EP); **F24F 2110/12** (2018.01 - US); **F24F 2110/20** (2018.01 - EP); **F24F 2110/22** (2018.01 - EP US);
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Citation (search report)

- [X] CN 109740787 A 20190510 - 4PARADIGM BEIJING TECH CO LTD
- [A] CN 111735177 A 20201002 - XIAN MOONEW ENERGY TECH SERVICE CO LTD
- [A] CN 110736244 B 20201020

Designated contracting state (EPC)

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Designated extension state (EPC)

BA ME

Designated validation state (EPC)

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DOCDB simple family (application)

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